



RAB Meeting

1 Feb 2007

Agenda



- I. Call to Order - 6:00 PM**
- II. Roll Call**
- III. Amendment/Approval of Minutes, 16 November 2006**
- IV. Old Business**
 - Operating Procedures (Clarification of DoD contractors)**
 - Conflict of Interest**
 - Information Resources**
- V. New Business**
 - CERCLA Training**
 - Document Review**
 - Way Ahead**
- VI. Adjournment - Next Meeting 3 May 2007**



Information Resources

- Information Repository in Hampton Public Library:
 - 2006 Notebook (Fact Sheet, Survey, Agenda & Minutes, Operating Procedures, Guidance)
 - Historical Records Review
 - Environmental Condition of Property
- RAB Web Site (under construction):
 - <http://147.248.251.93/monroe/sites/local/default.asp>



CERCLA 101 Training and the Fort Monroe Environmental Restoration Program

February 1, 2007



Background

- Prior to the 1970s, commonly accepted practices used to dispose of hazardous substances consisted of burials and discharges.
- The full environmental and public health risks associated with these practices were not known.
 - Love Canal, New York
 - Cuyahoga River, Great Lakes
- Similar events helped spur environmental laws and the creation of federal and state environmental protection agencies.



Legal Authorities and Organization



- Laws/Statutes - Congress *creates* legal requirements.
 - Most environmental legislation is codified in Title 42, “Public Health and Welfare” in the United States Code (USC)
- Regulations/Rules - Executive Branch interprets and adds technical judgment to implement the legal requirements.
 - The Environmental Protection Agency (EPA) regulations are found in Title 40, “Protection of Environment” in the Code of Federal Regulations (CFR)
- Executive Orders (EO)- The President can delegate certain Presidential authorities to Federal agencies.



Management and Cleanup Laws

- The Resources Conservation and Recovery Act (RCRA) was enacted by Congress in 1976.
 - RCRA requires control of hazardous wastes from the point of generation to their ultimate disposal or “cradle to grave”
 - Final regulations for controlling hazardous wastes under RCRA did not go into effect until 1980.
- In 1980, Congress passed the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly known as “Superfund.”
 - CERCLA requires identification, investigation and cleanup of sites contaminated by **past** releases of hazardous substances, pollutants and contaminants.
 - Implementing regulations found in 40 CFR 300, National Oil and Hazardous Substances Pollution Contingency Plan (NCP)



CERCLA Cleanup process

The cleanup process consists of several phases:

- Preliminary Assessment/Site Inspection (PA/SI)
 - investigations of site conditions
- HRS Scoring
 - The score is based on factors that relate to risk based on conditions at the site.
 - screening mechanism used to place sites on the National Priorities List (NPL), the list of the most serious sites identified for possible long-term cleanup
- Remedial Investigation/Feasibility Study (RI/FS)
 - determines the nature and extent of contamination



Cleanup process - Cont'd

- Records of Decision (ROD)/Decision Document (DD)
 - explains which cleanup alternatives will be used (ROD at NPL sites, DD at non-NPL sites)
- Remedial Design/Remedial Action (RD/RA)
 - preparation and implementation of plans and specifications for applying site remedies
- Response Complete (RC)
 - identifies completion of cleanup activities
- Long-Term Management
 - ensures response actions provide long-term protection of human health and the environment.



Information Resources

- EPA Web Site:

<http://www.epa.gov/superfund>

- Defense Environmental Network Information Exchange (DENIX):

[https://
www.denix.osd.mil/denix/Public/Library/Cleanup](https://www.denix.osd.mil/denix/Public/Library/Cleanup)



Defense Environmental Restoration Program (DERP)

- In 1986, the Superfund Amendments and Reauthorization Act (SARA, 10 USC 2701) amended CERCLA and established the DERP.
- SARA authorizes Secretary of Defense to carry out the DERP at DoD facilities
 - EO 12580, Superfund Implementation, January 23, 1986
 - EO 13016, Superfund Amendments, August 28, 1996
- Response actions taken under DERP to address releases must be conducted IAW the provisions of CERCLA 120 (42 USC 9620).



DERP - Cont'd

DERP categories:

- Installation Restoration Program (**IRP**)
 - environmental responses to hazardous substances, pollutants, contaminants and petroleum, oils and lubricants (POL).
- Military Munitions Response Program (**MMRP**)
 - environmental responses to non-operational ranges known or suspected to contain munitions and explosives of concern (MEC).



Status of Fort Monroe IRP

- PA completed September 1990 and sent to EPA in October 1990
 - 29 locations identified based on a July 1990 Property Report
- PA Addendum completed March 1992 to address HRS checklist deficiencies.
- Four Sites carried forward into DERP database
 - 2 former landfills, classified document incinerator, UXO Post-wide
- SI (?)
 - One round of groundwater samples collected/analyzed May 1992 at two former landfills.
 - No documentation found to indicate if any sampling occurred at the classified document incinerator
 - Geophysical survey conducted in 1994 post-wide for presence of UXO



Status of Fort Monroe IRP - Cont'd

- Geophysical survey report entitled *Ordnance and Explosive Waste (OEW) Investigation, Evaluation and Prioritization* (Parsons, 1995) was conducted per direction by BRAC 1993 Commission
- Findings and Conclusions
 - 73,331 anomalies detected, 79,900 more estimated in moat
 - 581 anomalies investigated, 7 cannonballs found
 - Estimated 21851 (29.8%) of anomalies have the potential to be ordnance
 - Estimated 1309 (1.8%) of anomalies will be UXO



Status of Fort Monroe IRP - Cont'd

- IRP sites listed as Response Complete in DERP database
 - Landfills & incinerator in 1992
 - UXO Post-wide in 1995
- Unknown if HRS scoring occurred



Military Munitions Response Program (MMRP)

- DoD and EPA agree that human health, environmental and explosive safety concerns at these sites need to be evaluated and addressed.
- National Defense Authorization Act for FY02 established the MMRP, a new program element of DERP for cleanup of property known, or suspected, to contain munitions and explosives of concern (MEC).
- MEC includes:
 - Unexploded ordnance (UXO)
 - Discarded military munitions (DMM) and/or
 - Munitions constituents (MC).



MMRP

- The MMRP integrates, to the extent practicable, explosives safety and environmental requirements to protect public safety, human health and the environment.
- MEC differs from hazardous, toxic, and radiological wastes (HTRW), substances covered in the IRP, as it presents an immediate risk of physical injury while HTRW generally present a threat to human health and environment through repeated and accumulated exposure.



MEC vs. HTRW

General Characteristics

MEC HTRW

Not very mobile Very mobile

Not chemical specific Chemical specific

Not concentration dependent Concentration dependent

Single exposure Multiple exposure

Narrow target population Broad target population

Immediate acute physical
injury Long-term health effects



MMRP

- Additional review and approvals required for MMRP response actions by the United States Army Technical Center for Explosive Safety (USATCES) and the DoD Explosives Safety Board (DDESB).
- USATCES:
 - Develops Army policies, procedures and regulations to ensure compliance with DoD Explosive Safety Standards
 - Provides technical assistance and advise
 - Provides Army approval of explosive safety submissions and site plans
- DDESB:
 - Approves explosive safety submissions and site plans
 - Approves explosives safety submissions of transfer documents



Status of Fort Monroe MMRP

- Site-specific response actions generally follow the CERCLA process.
- Preliminary Assessment (PA) involves recognizing the existence of the site, identifying safety risks, and determining which sites qualify for further investigation in MMRP.
 - *Closed, Transferred and Transferring (CTT) Range/Site Inventory Report* (Malcolm Pirnie, 2003): 13 sites identified



Fort Monroe MMRP - Cont'd

- Site Inspection (SI) involves a research of historical records in order to prioritize sites
 - *Historical Records Review* (Malcolm Pirnie, 2006):
 - Included all sites that had ordnance-related activities, not just MMRP-eligible sites
 - 57 sites identified, 44 recommended for further investigation



Army BRAC

Environmental Restoration Program (ERP)

- DERP refers to the entire DoD program.
- Army BRAC ERP refers to Army BRAC installations.
 - A comprehensive program to identify, investigate and clean up contamination, to include MEC, at Army installations designated for closure under BRAC.
 - BRAC ERP goal is to protect human health and the environment by cleaning up sites as quickly as resources permit to facilitate transfer of Army excess properties for reuse.
 - Restoration sites include those contaminated by past or closing defense activities and where a response is required by CERCLA, RCRA and the Community Environmental Response Facilitation Act (CERFA), which is the identification of uncontaminated parcels of land.



Environmental Requirements at Closing Army Installations



- Restoration activities (IRP and MMRP cleanups) and closure-related compliance
- The National Environmental Policy Act (NEPA) evaluation and documentation of potential environmental impacts associated with property disposal, transfer and reuse
- Cultural and Natural Resource considerations



Next Steps

- Identify Areas of Concern (AOC) based on review of historical uses of sites to determine if further investigation is warranted
 - *Environmental Condition of Property* (SAIC, November 2006)
- Site screening AOCs for HTRW issues
- RI Scoping for munitions issues
- BRAC Installation Action Plan (BIAP)- a management plan that identifies sites requiring environmental restoration, establishes schedules and identifies funding requirements.



Questions?



Document Review

Current documents available (for review only):

- *Historical Records Review* (Malcolm Pirnie, Apr 2006)
- *Environmental Condition of Property* (SAIC, Nov 2006)

Future Documents For Review & Comment:

Work Plans

Remedial Investigations

Feasibility Studies

Proposed Plans

Decision Documents

Remedial Designs/Remedial Actions

Prioritization Protocol

BRAC Installation Action Plan – annual updates



Way Ahead

- National Environmental Policy Act
 - Public scoping meeting comments due March 1, 2007
 - Environmental Assessment comment period: July 9 through August 8, 2007
- BRAC Installation Action Plan Workshop
 - Postponed
- Munitions Training